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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/768,072	01/23/2001	Liam B. Quinn	M-9137 US	2497

7590

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EXAMINER

PAN, YUWEN

ART UNIT	PAPER NUMBER
2682	

DATE MAILED: 11/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/768,072

Applicant(s)

QUINN ET AL.

Examiner

Yuwen Pan

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-5, 8-13, 15, 17 and 19-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 8-13, 15, 17, 19-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed 9/08/05 have been fully considered but they are not persuasive.

The applicant argues that newly added claim limitation "based on one of power being used to transmit, and power being received on a particular channel", overcomes the previous obviousness type of rejection. The examiner respectfully disagrees since it should be inherent that switching modes are based on either the transmitting or receiving power. First of all, power is everything in communication. Then, Vaisanen reference discloses an antenna sharing switching circuitry for multi-transceiver mobile terminal in which is on the same ISM radio band but having different power/range requirements (see column 3 and lines 47-60). Typically, it switches between WLAN (larger coverage requires more power) and Bluetooth (less power). Thus, the rejection stands.

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2, 4, 8-13, 15, 17, 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vaisanen et al (US006560443B1) in view of Yamazaki et al (US005884189A).

Per claims 1 and 15, Vaisanen discloses a portable computing system with selectable transceiver switching (see column 1 and line 8-14) comprising: a set of one or more transceivers, each of the transceivers with a unique communication protocol (see column 3 and line 61-column 4 and line 29), a switch capable of differentiating communication signals and determining and choosing an appropriate transceiver from the set of transceivers to communicate for the computing system (see figure 1, column 6 and lines 36-53); multi-band antenna capable of receiving and transmitting varying frequency signals to the chosen transceiver (see column 6 and lines 54-65), an antenna sharing switching circuitry for multi-transceiver mobile terminal in which is on the same ISM radio band but having different power/range requirements (see column 3 and lines 47-60). Vaisanen doesn't explicitly teach that the switch interfacing with a system stack including an application stack, a protocol stack, a client middle-ware stack and a software driver stack, the interface being at the software driver stack for controlling the interface to multiple types of the transceivers via an operating system. Yamazaki teaches that a software is installed in the control unit for controlling the wireless transceiver (column 2 and lines 25-28), the software controlled unit responds for adapting to different communication protocols such as cellular, cordless and PCS (see column 29-32, column 3 and line 52-column 4 and line 30). It would have been obvious to one ordinary skill in the art at the time the invention was made to combine the teaching of Rabe with Yamazaki such that it is fast and easy to regular switching function between two transceivers.

Per claim 2 and 4, Vaisanen doesn't disclose that the switch is a zener diode or a current limiter device that differentiates upon power transmission. The examiner takes "Office Notice"

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that it is notoriously well known in the art to utilize a zener diode as a switch, in order to activate or deactivate a transmit mode. Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to utilize a zener diode as a switch such that a transmit mode would be selected or deselected based on the input voltage.

Per claims 8-10, and 17, 20, 21 Yamazaki further teaches that selection of a transceiver is performed by a software driver with a higher level protocol stack and the software driver is instructed by a set of software application of the portable computer system (column 3 and line 52-column 4 and line 30).

Per claim 11, Vaisanen further discloses the set of transceiver and the switch are integrated into a circuit card (see figure 4 and column 8 and lines 38-60).

Per claim 19, Vaisanen further discloses that the portable computing system is in a casing and then antenna is integrated into the casing (see column 6 and lines 35-53).

Per claims 12 and 13, Vaisanen further discloses the circuit card connects to a system board of the portable computer system and the circuit card is a mini PCI card (see column 5 and lines 35-55).

3. Claims 3, 5-7, are rejected under 35 U.S.C. 103(a) as being unpatentable over Vaisanen et al (US006560443B1) and Yamazaki et al (US005884189A) as applied to claim 1 above, and further in view of Dvorkin et al (US006249686B1).

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Per claim 3, combination of Vaisanen and Yamazak doesn't teach an active power sensor device. Dvorkin discloses an active power sensor device (see figure 1 and item 78, column 2 and lines 33-47). It would have been obvious to one ordinary skill in the art at the time the invention was made to enclose the active power sensor device such that adequate signal strength would be implemented.

Per claims 5-7, Dvorkin further discloses a lookup table that associated transmission power with each of the transceivers; whereby the switch selects a transceiver from the set of transceivers when a certain power state in the lookup table is detected and the switch selects a transceiver based on a transmitted or received power (see column 2 and lines 1-47).

### *Conclusion*

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

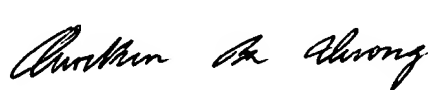
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yuwen Pan whose telephone number is 571-272-7855. The examiner can normally be reached on 8-5 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Quochien Vuong can be reached on 571-272-7902. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Yuwen Pan  
November 2, 2005

 11/04/05  
**QUOCHIE B. VUONG**  
**PRIMARY EXAMINER**